

**CBE 60546  
Fall 2021  
Homework  
Due 12/9/21**

1. Rework example 10.3.1 from Davis and Davis.
  - a. Solve this problem with a 1-D model. (That is, no radial concentration or temperature dependence.)
  - b. Solve the problem with the equations as given describing radial temperature and concentration dependence.
  - c. Compare the answers and explain the difference?
  - d. Do you get their answers on page 327? (Or the answer that Prof. McCready got in the Mathematica notebook? Can you explain any discrepancies?)
  
2. Rework example 12.8 from Hill and Root.

You don't need to derive everything in detail, just do a numerical solution that is intended to give the results on page 433.

Does your answer match the textbook? If not, does it match the answer that Prof. McCready got in the Mathematica notebook?  
Can you explain any discrepancies?